Product name:	CYP7B1 Rabbit Polyclonal Antibody
Cat number:	ABN09678
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 7B1. AA range:101-150
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Molecular Weight:	58kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This endoplasmic reticulum membrane protein catalyzes the first reaction in the cholesterol catabolic pathway of extrahepatic tissues, which converts cholesterol to bile acids. This enzyme likely plays a minor role in total bile acid synthesis, but may also be involved in the development of atherosclerosis, neurosteroid metabolism and sex hormone synthesis. Mutations in this gene have been associated with hereditary spastic paraplegia (SPG5 or HSP), an autosomal recessive disorder. [provided by RefSeq, Apr 2016],catalytic activity:Cholest-5-ene-3-beta,25-diol + NADPH + O(2) = cholest-5-ene-3-beta,7-alpha,25-triol + NADP(+) + H(2)O.,catalytic activity:Cholest-5-ene-3-beta,27-diol + NADPH + O(2) = cholest-5-ene-3-beta,7-alpha,27-triol + NADP(+) + H(2)O.,cofactor:Heme group.,disease:Defects in CYP7B1 are the cause of congenital bile acid synthesis defect type 3 (CBAS3) [MIM:603711]. Clinical features include severe cholestasis, cirrhosis and liver synthetic failure. Hepatic microsomal oxysterol 7-alpha-hydroxylase activity is undetectable.,disease:Defects in CYP7B1 are the cause of spastic paraplegia autosomal recessive type 5A (SPG5A) [MIM:270800]. Spastic paraplegia is a neurodegenerative disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. Rate of progression and the severity of symptoms are quite variable. Initial symptoms may include difficulty with balance, weakness and stiffness in the legs, muscle spasms, and dragging the toes when walking. In some forms of the disorder, bladder symptoms (such as incontinence) may appear, or the weakness and stiffness may spread to other parts of the body.,pathway:Lipid metabolism; bile acid biosynthesis.,similarity:Belongs to the cytochrome P450 family.,tissue specificity:Brain, testis, ovary, prostate, liver, colon, kidney, and small intestine.,